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10/698,600	10/31/2003	Juha H. Salo	042933/270197	9871

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EXAMINER	
SAINT CYR, JEAN D	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/698,600	SALO ET AL.	
	Examiner	Art Unit	
	JEAN D. SAINT CYR	2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-18,20-33,35-48 and 50-73* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-18,20-33,35-48 and 50-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This action is in response to applicant amendment filed on 04/02/2009. Claims 15-18, 20-33, 35-48,50-59 are still pending in the current application. Claims 1-14 were cancelled and claims 60-73 were added. **This action is made FINAL.**

Response to Arguments

Applicant's arguments were fully considered, but they were not persuasive. Applicant argues that cited references did not disclose storing in memory pre-broadcast content before a scheduled time for broadcast of the same pre-broadcast content and accessing the pre-broadcast content from the memory no sooner than the scheduled time of that pre-broadcast content .

However, Watson et al disclose the user is not aware of what data is being sent to their set-top box. The movies are pushed down by the provider to reside passively in the box for a finite time period. Movies transmitted to the set-top box also come with associated information that defines certain characteristics of the movie. This associated information is called metadata. For example, a movie may have an associated start and end date or time which limits the time period in which a movie can be viewed. A movie may arrive and be stored in the set-top box, however it may have a start date associated with it which does not allow it to be viewed until that date. This allows for any discrepancies in transmission times for movies that may vary from one location to another. The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager. Metadata is created for each movie. This may include scheduling information such as dates or times when to make a movie available for viewing, and how long it should remain available. That means the movies are preloaded in the set top box, but the users will be able to view them according to the schedule of the service provider.

And Connelly et al disclose client systems 105, 107 and 109 capture and process this pre-broadcast meta-data information in order to determine when to receive content,

where to receive content and which content to receive. The clients wake-up at the pre-specified time indicated in the meta-data broadcast schedule to receive the meta-data from the server. The client system selectively receives and/or stores the data files that are later broadcast by the server. Each client 105, 107 and 109 contains a known scheduling service, which accepts requests to wake up, or be activated, at a specific time to receive the information broadcast by the server. And fig.3 shows that the server broadcasts data file and schedule to the client in step 315.

Finally, Syed et al disclose at prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-downloaded broadcast content available for presentation to the receiver. As a result, this action is made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15-18, 20, 22-23, 25, 27, 29, 45, 46-48, 50, 52-53, 55, 57, 59, 60-64, 66-67, 69, 71, 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Syed et al, US No. 20030083977.

Re claim 15, Watson et al disclose an apparatus comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following(the set top box will begin power-up initialization by loading and executing boot code that resides in Flash memory,0124):

storing, in the memory, at least one piece of pre- broadcast content, the pre-broadcast content being stored before a scheduled time for broadcast of the same at least one piece of content by a content source, the scheduled time specified by a schedule(The movies are pushed down by the provider to reside passively in the box for a finite time period,0012; the actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager,0092;0087).

But did not explicitly disclose accessing at least one piece of pre-broadcast content from the memory no sooner than a the scheduled time for broadcast of the same at least one piece of content, and presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

However, Syed et al disclose accessing at least one piece of pre-broadcast content from the memory no sooner than a the scheduled time for broadcast of the same at least one piece of content, and presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source(at prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-downloaded broadcast content available for presentation to the receiver,0042).

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre-downloaded content from storage at predetermined broadcast time, as taught by Syed, for the purpose of reducing congestion of bandwidth during transmission and establishing synchronization between the broadcast server and the receiver.

Re claim 16, Watson et al disclose wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: synchronizing the accessed at least one piece of pre-broadcast content

with the same at least one piece of content broadcast by the content source, and wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting the synchronized at least one piece of pre- broadcast content(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager,0092).

Re claim 17, Watson et al disclose wherein storing at least one piece of pre-broadcast content comprises at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content(The movies are pushed down by the provider to reside passively in the box for a finite time period, 0012).

Re claim 18, Watson et al disclose wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus (the set top box will begin power-up initialization by loading and executing boot code that resides in Flash memory,0124)to further perform the following: receiving at least one piece of content maintained by a continuity server of a content source(the method involves transmitting movies to a set-top box; the content delivery system is responsible for delivering data to set top boxes, 0044), and

wherein storing at least one piece of pre-broadcast content comprises storing the received at least one piece of content as the at least one piece of pre-broadcast content(the method involves transmitting movies to a set-top box and allowing movies to accumulate. A hard disk drive in the set-top box is used to store movies, 0008; 0012).

Re claim 20, Watson et al disclose wherein the receiving at least one piece of content comprises receiving an encoded at least one piece of content (see fig.1, content preparation & encoding; Movies are transmitted to the set-top box using a new data casting technology which allows data to be encoded onto standard television signals and transmitted using existing television transmitters and broadcast towers, 0012) and decoding the encoded at least one piece of content, the respective at least one piece of

content having been at least one of encoded or transcoded at the content source(see fig.1f, PES Decryption/De-scramble; the set top box allows for the movie to be decrypted and played, 0015).

Re claim 22, Watson et al disclose wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: releasing each piece of pre-broadcast content when a current time of the apparatus matches the scheduled time for broadcast of the same piece of content by the content source, wherein accessing at least one piece of pre- broadcast content comprises accessing at least one released piece of pre-broadcast content(The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092; that means pre-stored contents are activated according to predefined schedule).

Re claim 23, Watson et al disclose wherein the content source broadcasts the same at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: synchronizing the current time of the apparatus with the current time of the content source(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, that means there is synchronization in the schedule where stored schedule in the set-top box needs to match the schedule at the digital asset manager,0092).

Re claim 25, Watson et al disclose wherein memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time,-and deleting, from the memory of the apparatus, at least one expired piece of pre-broadcast content(the content provider may

specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

Re claim 27, Watson et al disclose wherein the storing at least one piece of pre-broadcast content further comprises storing the schedule(Any Movie news or Barker Channel content that has passed its end SCHEDULE_PERIOD date should be deleted,0216; that means it was stored locally).

Re claim 29, Watson et al disclose wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: receiving at least one slot of the schedule at the apparatus, and wherein the accessing at least one piece of pre- broadcast content comprises accessing at least one piece of pre-broadcast content in accordance with the at least one slot received -at the apparatus(running set of videos seen while the user is on the user interface main menu, showing what products are available,0092).

Re claim 45, is met as previously discussed with respect to claim 15.
Re claim 46, is met as previously discussed with respect to claim 16.
Re claim 47, is met as previously discussed with respect to claim 17.
Re claim 48, is met as previously discussed with respect to claim 18.
Re claim 50, is met as previously discussed with respect to claim 20.
Re claim 52, is met as previously discussed with respect to claim 22.
Re claim 53, is met as previously discussed with respect to claim 23.
Re claim 55, is met as previously discussed with respect to claim 25.
Re claim 57, is met as previously discussed with respect to claim 27.
Re claim 59, is met as previously discussed with respect to claim 29.

Re claim 60, Watson et al disclose a content source(the content delivery system is responsible for delivering data to set top boxes, 0044) comprising a continuity server

configured to maintain at least one piece of content(see fig.1, digital asset management) and a schedule (The distribution database contains content and component broadcast schedules, data cast distribution logs and set top box pre-load information, 0051), wherein the schedule specifies at least one scheduled time for broadcast of the at least one piece of content by the content source, and wherein the content source is configured to broadcast the at least one piece of content in accordance with the schedule(the same movie may be broadcast to the set-top box several times, 0088);and

a terminal configured to store, in a memory, at least one piece of pre-broadcast content comprising the same at least one piece of content maintained by the continuity server, the terminal being configured to store the at least one piece of pre-broadcast content before the scheduled time for broadcast of the same at least one piece of content(The set-top box has a processor which is capable of receiving the data stream from the broadcast signal, reassembling data, and writing data to the hard drive, 0011).

But did not explicitly disclose wherein the terminal is configured to access the at least one piece of pre-broadcast content from the memory no sooner than the scheduled time for broadcast of the same at least one piece of content, and thereafter present the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

However, Syed et al disclose accessing at least one piece of pre-broadcast content from the memory no sooner than a the scheduled time for broadcast of the same at least one piece of content, and presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source(at prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-downloaded broadcast content available for presentation to the receiver,0042).

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre downloaded content from storage at predetermined broadcast time, as taught by Syed, for the purpose of establishing synchronization between the broadcast server and the receiver.

Re claim 61, Watson et al disclose wherein the terminal is configured to synchronize the accessed at least one piece of pre-broadcast content with the same at least one piece of content broadcast by the content source before presenting the accessed at least one piece of pre-broadcast content, and wherein the terminal is configured to present the synchronized at least one piece of pre-broadcast content(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager,0092).

Re claim 62, Watson et al disclose wherein the terminal is configured to store the at least one piece of pre-broadcast content before the content source broadcasts the same at least one piece of content(The movies are pushed down by the provider to reside passively in the box for a finite time period, 0012).

Re claim 63, Watson et al disclose wherein the content source is configured to send, to the terminal, the at least one piece of content maintained by the continuity server(the method involves transmitting movies to a set-top box; the content delivery system is responsible for delivering data to set top boxes, 0044), and wherein the terminal is configured to receive and store the received at least one piece of content as the at least one piece of pre-broadcast content(the method involves transmitting movies to a set-top box and allowing movies to accumulate. A hard disk drive in the set-top box is used to store movies, 0008; 0012).

Re claim 64, Watson et al disclose wherein the content source is configured to at least one of encode or transcode the at least one piece of content and the schedule before

sending the at least one piece of content and the schedule to the terminal, and wherein when the content source encodes the at least one piece of content(see fig.1, content preparation & encoding; Movies are transmitted to the set-top box using a new data casting technology which allows data to be encoded onto standard television signals and transmitted using existing television transmitters and broadcast towers, 0012), the terminal is configured to receive the encoded at least one piece of content, and thereafter decode the encoded at least one piece of content(see fig.1f, PES Decryption/De-scramble; the set top box allows for the movie to be decrypted and played, 0015).

Re claim 66, Watson et al disclose wherein the terminal is configured to release each piece of pre-broadcast content when a current time of the terminal matches the scheduled time for broadcast of the same piece of content by the content source, and wherein the terminal is configured to access at least one released piece of pre-broadcast content (The actual movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, 0092; that means pre-stored contents are activated according to predefined schedule).

Re claim 67, Watson et al disclose wherein the content source is configured to broadcast the at least one piece of content when a current time of the content source matches the at least one scheduled time, and wherein the terminal is also configured to synchronize the current time of the terminal with the current time of the content source(movie content on the hard disk drive is turned over periodically, as scheduled by the digital asset manager, that means there is synchronization in the schedule where stored schedule in the set-top box needs to match the schedule at the digital asset manager,0092).

Re claim 69, Watson et al disclose wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to the scheduled time, and wherein the terminal is configured to delete, from the memory,

at least one expired piece of pre-broadcast content(the content provider may specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

Re claim 71, Watson et al disclose wherein the terminal is also configured to store a schedule(Any Movie news or Barker Channel content that has passed its end SCHEDULE_PERIOD date should be deleted,0216; that means it was stored locally)comprising the same schedule maintained by the continuity server(see fig.1a, scheduler).

Re claim 73, Watson et al disclose wherein the schedule includes at least one slot specifying a scheduled time and a piece of pre-broadcast content, wherein the terminal is configured to receive at least one slot of the schedule, and wherein the terminal is configured to access at least one piece of pre-broadcast content in accordance with the at least one slot received by the terminal(running set of videos seen while the user is on the user interface main menu, showing what products are available,0092).

Claims 24,26, 28, 54, 56, 58, 68, 70, 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Syed et al and further in view Connelly et al, US No. 7284064.

Re claim 24, Watson et al disclose wherein memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following expiring each released piece of pre-broadcast content when the current time is subsequent to the scheduled time(Movie Expirations, 0304; the movies are pushed down by the provider to reside passively in the box for a finite time period, 0012).

But did not explicitly disclose maintaining, in the memory of the apparatus, at least one expired piece of pre-broadcast content.

However, Connelly et al disclose if a user has not watched a particular piece of content, the storage space occupied by that piece of content is generally considered not to be available for storage of another piece of content, col.14, lines 56-59; that means expired contents can stay in the hard drive for a while if not watched yet.

it would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing keep expired content in storage, as taught by Connelly, for the purpose of allowing users to watch passed programs.

Re claim 26, Watson et al disclose wherein deleting at least one expired piece of pre-broadcast content comprises overwriting at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content(the content provider may specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

But did not explicitly disclose wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: maintaining at least one expired piece of pre-broadcast content in the memory of the apparatus.

However, Connelly et al disclose if a user has not watched a particular piece of content, the storage space occupied by that piece of content is generally considered not to be available for storage of another piece of content, col.14, lines 56-59; that means expired contents can stay in the hard drive for a while if not watched yet.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing

keep expired content in storage, as taught by Connelly, for the purpose of allowing users to watch passed programs.

Re claim 28, Watson et al disclose wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time(running set of videos seen while the user is on the user interface main menu, showing what products are available,0092), wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: receiving a selection of at least one piece of pre-broadcast content for the at least one slot(Once a movie has been selected,0227).

But did not explicitly disclose modifying the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

However, Connelly et al disclose broadcast schedules can change over time depending on which data files are available from the server and which content or data files are accessed and/or classified by the clients,col.15, lines 11-14.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing modify the schedule, as taught by Connelly, for the purpose of allowing the system to update the schedule according to selection of the users.

Re claim 54, is met as previously discussed with respect to claim 24.
Re claim 56, is met as previously discussed with respect to claim 26.
Re claim 58, is met as previously discussed with respect to claim 28.

Re claim 68, Watson et al disclose wherein the terminal is also configured to expire each released piece of pre-broadcast content when the current time is subsequent to

the scheduled time(Movie Expirations, 0304; the movies are pushed down by the provider to reside passively in the box for a finite time period, 0012).

But did not explicitly disclose wherein the terminal is configured to maintain, in the memory, at least one expired piece of pre-broadcast content.

However, Connelly et al disclose if a user has not watched a particular piece of content, the storage space occupied by that piece of content is generally considered not to be available for storage of another piece of content, col.14, lines 56-59; that means expired contents can stay in the hard drive for a while if not watched yet.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing keep expired content in storage, as taught by Connelly, for the purpose of allowing users to watch passed programs.

Re claim 70, Watson et al disclose wherein the terminal is configured to overwrite at least one expired piece of pre-broadcast content with at least one subsequent piece of pre-broadcast content(the content provider may specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

But did not explicitly disclose wherein the terminal is configured to maintain at least one expired piece of pre-broadcast content in the memory of the terminal.

However, Connelly et al disclose if a user has not watched a particular piece of content, the storage space occupied by that piece of content is generally considered not to be available for storage of another piece of content, col.14, lines 56-59; that means expired contents can stay in the hard drive for a while if not watched yet.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing keep expired content in storage, as taught by Connelly, for the purpose of allowing users to watch passed programs.

Re claim 72, Watson et al disclose wherein the schedule includes at least one slot specifying broadcast of a selectable piece of pre-broadcast content at a respective scheduled time(running set of videos seen while the user is on the user interface main menu, showing what products are available,0092), wherein the terminal is configured to receive a selection of at least one piece of pre-broadcast content for the at least one slot(Once a movie has been selected,0227).

But did not explicitly disclose thereafter modify the schedule to specify the selected at least one piece of pre-broadcast content in the at least one slot.

However, Connelly et al disclose broadcast schedules can change over time depending on which data files are available from the server and which content or data files are accessed and/or classified by the clients,col.15, lines 11-14.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing modify the schedule, as taught by Connelly, for the purpose of allowing the system to update the schedule according to selection of the users.

Claims 30-33, 35, 37-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Connelly et al, US No. 7284064.

Re claim 30, Watson et al disclose a method comprising: storing, in a memory of an apparatus, at least one piece of pre-broadcast content, the at least one piece of pre-broadcast content being stored before a scheduled time for broadcast of the same at

least one piece of content by a content source(Movie Expirations, 0304; the movies are pushed down by the provider to reside passively in the box for a finite time period, 0012), the scheduled time specified by a schedule(the content provider may specify an end date associated with a movie, after which date the movie can no longer be viewed, and is automatically deleted from the set-top box, 0182).

But did not explicitly disclose accessing at least one piece of pre-broadcast content from the memory of the apparatus no sooner than the scheduled time for broadcast of the same at least one piece of content; and presenting the accessed at least one piece of pre-broadcast content consistent with the scheduled time for broadcast of the same at least one piece of content by the content source.

However, Connelly et al disclose client systems 105, 107 and 109 capture and process this pre-broadcast meta-data information in order to determine when to receive content, where to receive content and which content to receive. The clients wake-up at the pre-specified time indicated in the meta-data broadcast schedule to receive the meta-data from the server, col.6, lines 13-16; col.6, lines 43-44; the client system selectively receives and/or stores the data files that are later broadcast by the server, abstract.

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre-broadcast content from memory according to schedule time, as taught by Connelly, for the purpose of reducing congestion of bandwidth during transmission and allowing users to watch contents in real-time.

Re claim 31, is met as previously discussed with respect to claim 16.
Re claim 32, is met as previously discussed with respect to claim 17.
Re claim 33, is met as previously discussed with respect to claim 18.
Re claim 35, is met as previously discussed with respect to claim 20.
Re claim 37, is met as previously discussed with respect to claim 22.

Re claim 38, is met as previously discussed with respect to claim 23.
Re claim 39, is met as previously discussed with respect to claim 24.
Re claim 40, is met as previously discussed with respect to claim 25.
Re claim 41, is met as previously discussed with respect to claim 26.
Re claim 42, is met as previously discussed with respect to claim 27.
Re claim 43, is met as previously discussed with respect to claim 28.
Re claim 44, is met as previously discussed with respect to claim 29.

Claims 21, 51, 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Syed and further in view of Traw et al, US No. 20030066090

Re claim 21, Watson et al did not explicitly disclose wherein the schedule also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: receiving at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content, and

wherein accessing at least one piece of pre- broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory or at least one piece of live broadcast content received by at the apparatus, and wherein the presenting the accessed at least one piece of pre-broadcast content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

However, Syed et al disclose wherein accessing at least one piece of pre- broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory or at least one piece of live broadcast content received by at the apparatus, and wherein the presenting the accessed at least one piece of pre-broadcast

content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content(at prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-downloaded broadcast content available for presentation to the receiver,0042).

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre-downloaded content from storage at predetermined broadcast time, as taught by Syed, for the purpose of establishing synchronization between the broadcast server and the receiver.

And Traw et al disclose wherein the schedule also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source(time specified in the data file broadcast schedule, 0047),wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform the following: receiving at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content(the client 201 can stream data files, e.g. television and movies, tailored to the individual's tastes from live and captured content on a personalized channel 214 to the display device 219, with no user interaction required, except to pick the personalized channel, 0057).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing accessing live broadcast content , as taught by Traw, for the purpose of allowing users to view real-time program.

Re claim 51, is met as previously discussed with respect to claim 21.

Re claim 65, Watson et al did not explicitly disclose wherein the schedule maintained by the continuity server also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, wherein the terminal is configured to receive at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content, wherein the terminal is configured to access at least one of at least one piece of pre-broadcast content stored by the terminal and at least one piece of live broadcast content received by the terminal, and wherein the terminal is configured to present at least one of the accessed at least one piece of pre- broadcast content or the accessed at least one piece of live broadcast content.

However, Syed et al disclose wherein the terminal is configured to access at least one of at least one piece of pre-broadcast content stored by the terminal and at least one piece of live broadcast content received by the terminal, and wherein the terminal is configured to present at least one of the accessed at least one piece of pre- broadcast content or the accessed at least one piece of live broadcast content(at prime time or at a predetermined broadcast time, the display deactivate flag is enabled, thereby making the pre-downloaded broadcast content available for presentation to the receiver,0042).

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre downloaded content from storage at predetermined broadcast time, as taught by Syed, for the purpose of establishing synchronization between the broadcast server and the receiver.

And Traw et al disclose wherein the schedule maintained by the continuity server also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source(time specified in the data file broadcast schedule, 0047), wherein the terminal is configured to receive at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the

respective at least one piece of live broadcast content(the client 201 can stream data files, e.g. television and movies, tailored to the individual's tastes from live and captured content on a personalized channel 214 to the display device 219, with no user interaction required, except to pick the personalized channel, 0057).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Syed in introducing accessing live broadcast content , as taught by Traw, for the purpose of allowing users to view real-time programs.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al in view of Connelly and further in view of Traw et al, US No. 20030066090.

Re claim 36, Watson et al did not explicitly disclose wherein the schedule also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, and wherein the method further comprises: receiving, at the apparatus, at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content;

wherein accessing at least one piece of pre-broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory of the apparatus or at least one piece of live broadcast content received at the apparatus, and wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content.

However, Connelly et al disclose wherein accessing at least one piece of pre-broadcast content comprises accessing at least one of at least one piece of pre-broadcast content stored in the memory of the apparatus or at least one piece of live

broadcast content received at the apparatus(the client system selectively receives and/or stores the data files that are later broadcast by the server, abstract), and wherein presenting the accessed at least one piece of pre-broadcast content comprises presenting at least one of the accessed at least one piece of pre-broadcast content or the accessed at least one piece of live broadcast content(client systems 105, 107 and 109 capture and process this pre-broadcast meta-data information in order to determine when to receive content, where to receive content and which content to receive. The clients wake-up at the pre-specified time indicated in the meta-data broadcast schedule to receive the meta-data from the server, col.6, lines 13-16; col.6, lines 43-44).

It would have been obvious for any person of ordinary skill in the art at that time the invention was to modify the invention of Watson in introducing accessing pre-broadcast content from memory according to schedule time, as taught by Connelly, for the purpose of reducing congestion of bandwidth during transmission.

And Traw et al disclose wherein the schedule (time specified in the data file broadcast schedule, 0047) also specifies at least one scheduled time for broadcast of at least one piece of live broadcast content by the content source, and wherein the method further comprises: receiving, at the apparatus, at least one piece of live broadcast content when a current time matches the scheduled time for broadcast of the respective at least one piece of live broadcast content(the client 201 can stream data files, e.g. television and movies, tailored to the individual's tastes from live and captured content on a personalized channel 214 to the display device 219, with no user interaction required, except to pick the personalized channel, 0057).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Watson in view of Connelly in introducing accessing live broadcast content , as taught by Traw, for the purpose of allowing users to view real-time programs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST.If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reach on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see htpp://pair-direct.uspto.gov. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199(IN USA OR CANADA) or 571-272-1000.

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